

This Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-7: Cancelled

8. (Currently Amended): A method of identifying a modulator of a TGR183 polypeptide that has G-protein coupled receptor activity and is activated by nicotinic acid, and (A) comprises at least 70% amino acid sequence identity to SEQ ID NO:6, (B) comprises at least 20 contiguous amino acids of SEQ ID NO:6, or (C) comprises the amino acid sequence of SEQ ID NO:6; wherein the method comprises:

contacting a compound with a recombinant TGR183 polypeptide; and
determining the level of binding of nicotinic acid to the TGR183 polypeptide in comparison to the level of binding in the absence of compound.

9. (Original): The method of claim 8, wherein the step of determining the level of binding comprises detecting nicotinic acid binding in a competitive binding assay.

10. (Original): The method of claim 8, wherein the step of determining the level of binding comprises detecting an alteration in a nicotinic acid-induced TGR183 activity.

11. (Previously Presented): The method of claim 10, wherein the nicotinic acid-induced TGR183 activity is an increase in intracellular calcium.

Claims 12-19: Cancelled

20. (NEW): The method of claim 8, wherein the TGR183 polypeptide comprises at least 75% amino acid sequence identity to SEQ ID NO:6.

21. (NEW): The method of claim 8, wherein the TGR183 polypeptide comprises at least 80% amino acid sequence identity to SEQ ID NO:6.

22. (NEW): The method of claim 8, wherein the TGR183 polypeptide comprises at least 85% amino acid sequence identity to SEQ ID NO:6.

23. (NEW): The method of claim 8, wherein the TGR183 polypeptide comprises at least 90% amino acid sequence identity to SEQ ID NO:6.

24. (NEW): The method of claim 8, wherein the TGR183 polypeptide comprises at least 95% amino acid sequence identity to SEQ ID NO:6.

25. (NEW): The method of claim 8, wherein the TGR183 polypeptide comprises the amino acid sequence of SEQ ID NO:6

26. (NEW): The method of claim 8, wherein the TGR18 polypeptide comprises at least 30 contiguous amino acids of SEQ ID NO:6.

27. (NEW): The method of claim 8, wherein the TGR18 polypeptide comprises at least 40 contiguous amino acids of SEQ ID NO:6.

28. (NEW): The method of claim 8, wherein the TGR18 polypeptide comprises at least 50 contiguous amino acids of SEQ ID NO:6.

29. (NEW): The method of claim 8, wherein the TGR18 polypeptide comprises at least 100 contiguous amino acids of SEQ ID NO:6.

30. (NEW): The method of claim 25, wherein the step of determining the level of binding comprises detecting nicotinic acid binding in a competitive binding assay.

31. (NEW): The method of claim 25, wherein the step of determining the level of binding comprises detecting an alteration in a nicotinic acid-induced TGR183 activity.

32. (NEW): The method of claim 31, wherein the nicotinic acid-induced TGR183 activity is an increase in intracellular calcium.